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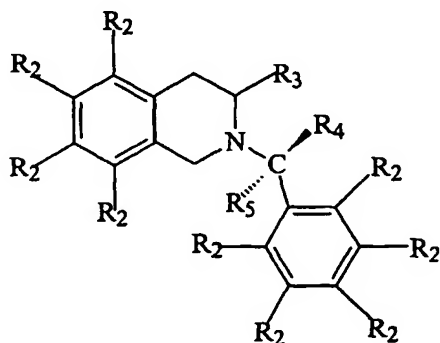
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(54) Title: SULFATED BIS-CYCLIC AGENTS



(I)

(57) Abstract: Sulfated bis-cyclic compounds that are potent anticoagulants and methods for their manufacture are provided. The sulfated compounds are bis-cyclic moieties comprised of an ioquinoline ring joined to a phenyl ring with the general chemical structure formula (I) where R₂ is hydrogen or a sulfate moiety, R₃ is either hydrogen or carboxylate moiety; R₄ is a hydrogen or oxygen; and R₅ is a hydrogen if R₄ is a hydrogen, and is absent if R₄ is oxygen. Counterions such as sodium may also be coordinated to the sulfate and carboxylate moieties.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/15731

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C07D 217/04; A61K 31/47

US CL : 546/146,149; 514/307

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 546/146,149; 514/307

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched
NONE

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
CAS ONLINE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	Gunnarsson et al. Designing Small, Nonsugar Activators of Antithrombin Using Hydropathic Interaction Analyses. J. Med. Chem. 2000. Vol. 45, pages 1233-1243.	1-15
A	Gunnarsson et al. Interaction of Designed Sulfated Favalanoids with Antithrombin: Lessons on the Design of Organic Activators. J. Med. Chem. 2002. Vol. 45, pages 4460-4470.	1-15



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